BUILDING SITE DEVELOPMENT
Clay County, Kansas

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. The following tables show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. Not limited indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. Slightly limited indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. Somewhat limited indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. Very limited indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement; and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

BUILDING SITE DEVELOPMENT--Continued
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for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The
larger the value, the greater the potential limitation. See text for further explanation of
ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
029CT:							
Crete---------------	80	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.00
029LO:							
Longford------------	65	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.12
061CF:							
Clime---------------	60	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.84	Slope	0.84	Slope	1.00
				Depth to soft bedrock	0.46		
Sogn----------------	20	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Shrink-swell	0.73	Shrink-swell	0.73	Shrink-swell	0.73
						Slope	0.12
143EE:							
Edalgo--------------	60	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Slope	0.16	Depth to soft bedrock	0.42	Slope	1.00
				Slope	0.16		
Hedville------------	40	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
143HO:							
Hobbs---------------	100	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
143HP:							
Hobbs---------------	55	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
Geary---------------	45	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.04	Slope	0.04	Shrink-swell	0.50
201KS:							
Kipson--------------	70	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
Sogn----------------	15	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Slope	1.00
		Slope	0.16	Slope	0.16	Shrink-swell	0.50
201LH:							
Lancaster-----------	50	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.50	Depth to soft bedrock	0.54	Slope	1.00
		Slope	0.04	Shrink-swell	0.50	Shrink-swell	0.50
				Slope	0.04		
Hedville------------	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
Be:							
Benfield------------	89	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
				Depth to soft bedrock	0.29	Slope	0.12
Cb:							
Calco---------------	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	1.00	Depth to saturated zone	1.00	Shrink-swell	1.00
		Depth to saturated zone	0.98	Shrink-swell	0.50	Depth to saturated zone	0.98
Cg:							
Cass----------------	89	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
Cr:							
Crete---------------	95	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00

BUILDING SITE DEVELOPMENT--Continued
Clay County, Kansas

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larger the value, the greater the potential limitation. See text for further explanation of
ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value

Cs:
  Crete---------------
	90	Very limited
		  Shrink-swell
			1.00	Very limited
				  Shrink-swell
					1.00	Very limited
						  Shrink-swell
							1.00

CSS:
  Crete---------------
	95	Very limited
		  Shrink-swell
			1.00	Very limited
				  Shrink-swell
					1.00	Very limited
						  Shrink-swell
							1.00

Ct:
  Crete---------------
	83	Very limited
		  Shrink-swell
			1.00	Very limited
				  Shrink-swell
					1.00	Very limited
						  Shrink-swell
						  Slope
							1.00
							0.12

Cx:
  Crete---------------
	83	Very limited
		  Shrink-swell
			1.00	Very limited
				  Shrink-swell
					1.00	Very limited
						  Shrink-swell
						  Slope
							1.00
							0.48

Ed:
  Edalgo-------------
	88	Very limited
		  Shrink-swell
			1.00	Very limited
				  Shrink-swell
				  Depth to soft
				    bedrock
					1.00
					0.42
						Very limited
						  Shrink-swell
						  Slope
							1.00
							0.48

Er:
  Eudora-------------
	95	Not limited		Not limited		Somewhat limited
						  Slope
							0.00

Eu:
  Eudora-------------
	85	Very limited
		  Flooding
			1.00	Very limited
				  Flooding
					1.00	Very limited
						  Flooding
							1.00

Gc:
  Geary-------------
	83	Somewhat limited
		  Shrink-swell
			0.96	Somewhat limited
				  Shrink-swell
					0.96	Somewhat limited
						  Shrink-swell
						  Slope
							0.96
							0.12

Gf:
  Geary-------------
	85	Somewhat limited
		  Shrink-swell
		  Slope
			0.96
			0.63
				Somewhat limited
				  Shrink-swell
				  Slope
					0.96
					0.63
						Very limited
						  Slope
						  Shrink-swell
							1.00
							0.96

Gh:
  Geary-------------
	85	Somewhat limited
		  Shrink-swell
			0.96	Somewhat limited
				  Shrink-swell
					0.96	Somewhat limited
						  Shrink-swell
						  Slope
							0.96
							0.86

Gm:
  Gibbon-------------
	95	Very limited
		  Flooding
		  Depth to
		    saturated zone
			1.00
			0.07
				Very limited
				  Flooding
				  Depth to
				    saturated zone
					1.00
					1.00
						Very limited
						  Flooding
						  Depth to
						    saturated zone
							1.00
							0.07

He:
  Haynie-------------
	65	Very limited
		  Flooding
			1.00	Very limited
				  Flooding
					1.00	Very limited
						  Flooding
							1.00

Sarpy-------------	34	Very limited
		  Flooding
			1.00	Very limited
				  Flooding
					1.00	Very limited
						  Flooding
							1.00

Hn:
  Hobbs-------------
	93	Very limited
		  Flooding
		  Shrink-swell
			1.00
			0.00
				Very limited
				  Flooding
					1.00	Very limited
						  Flooding
						  Shrink-swell
							1.00
							0.00

Ho:
  Hobbs-------------
	89	Very limited
		  Flooding
		  Shrink-swell
			1.00
			0.02
				Very limited
				  Flooding
				  Shrink-swell
					1.00
					0.02
						Very limited
						  Flooding
						  Shrink-swell
							1.00
							0.02

Hr:
  Holder-------------
	90	Somewhat limited
		  Shrink-swell
			0.82	Somewhat limited
				  Shrink-swell
					0.82	Somewhat limited
						  Shrink-swell
						  Slope
							0.82
							0.12

Ks:
  Kipson-------------
	70	Somewhat limited
		  Depth to soft
		    bedrock
		  Slope
		  Shrink-swell
			1.00
			0.84
			0.50
				Very limited
				  Depth to soft
				    bedrock
				  Slope
				  Shrink-swell
					1.00
					0.84
					0.50
						Very limited
						  Depth to soft
						    bedrock
						  Slope
						  Shrink-swell
							1.00
							1.00
							0.50

Sogn-------------	15	Very limited
		  Depth to hard
		    bedrock
		  Slope
		  Shrink-swell
			1.00
			0.84
			0.50
				Very limited
				  Depth to hard
				    bedrock
				  Slope
				  Shrink-swell
					1.00
					0.84
					0.50
						Very limited
						  Depth to hard
						    bedrock
						  Slope
						  Shrink-swell
							1.00
							1.00
							0.50

Lc:
  Lancaster-----------
	90	Somewhat limited
		  Shrink-swell
			0.06	Somewhat limited
				  Depth to soft
				    bedrock
				  Shrink-swell
					0.10
					0.06
						Somewhat limited
						  Slope
						  Shrink-swell
							0.12
							0.06

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ratings in this table.)

Map symbol and soil name	Pct of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Lh:							
Lancaster----------	55	Somewhat limited		Somewhat limited		Very limited	
		Shrink-swell	0.27	Shrink-swell	0.27	Slope	1.00
		Slope	0.04	Depth to soft bedrock	0.10	Shrink-swell	0.27
				Slope	0.04		
Hedville------------	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Slope	1.00
		Slope	1.00	Slope	1.00	Depth to hard bedrock	1.00
LN:							
Longford------------	85	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.12
M-W:							
Miscellaneous Water-	100	Not rated		Not rated		Not rated	
Mu:							
Muir----------------	89	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	0.00			Shrink-swell	0.00
Sa:							
Sarpy---------------	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
Su:							
Sutphen-------------	88	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
		Ponding	1.00	Ponding	1.00	Ponding	1.00
Tu:							
Tully---------------	91	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
						Slope	0.12
W:							
Water---------------	100	Not rated		Not rated		Not rated	
We:							
Wells---------------	83	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.73			Shrink-swell	0.73
						Slope	0.12

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    larger the value, the greater the potential limitation. See text for further explanation of
    ratings in this table.)

Map symbol and soil name	Pct of map unit	Local roads and streets	Value	Shallow excavations	Value	Lawns and landscaping	Value
		Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
029CT:							
Crete---------------	80	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Too clayey	0.12		
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
029LO:							
Longford------------	65	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Frost action	0.50				
061CF:							
Clime---------------	60	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.84	Slope	0.84
		Shrink-swell	1.00	Depth to soft bedrock	0.46	Depth to bedrock	0.46
		Slope	0.84	Too clayey	0.28		
				Cutbanks cave	0.10		
Sogn----------------	20	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Low strength	1.00	Cutbanks cave	0.10	Droughty	1.00
		Shrink-swell	0.73			Content of large stones	0.00
		Frost action	0.50				
143EE:							
Edalgo--------------	60	Very limited		Somewhat limited		Somewhat limited	
		Shrink-swell	1.00	Too clayey	0.50	Depth to bedrock	0.42
		Frost action	0.50	Depth to soft bedrock	0.42	Slope	0.16
		Slope	0.16	Slope	0.16		
				Cutbanks cave	0.10		
Hedville------------	40	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	1.00
						Content of large stones	0.68
						Gravel content	0.00
143HO:							
Hobbs---------------	100	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Frost action	0.50	Cutbanks cave	0.10		
143HP:							
Hobbs---------------	55	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Frost action	0.50	Cutbanks cave	0.10		
Geary---------------	45	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	0.10	Slope	0.04
		Shrink-swell	0.50	Slope	0.04		
		Slope	0.04				
201KS:							
Kipson--------------	70	Very limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Shrink-swell	0.50	Cutbanks cave	0.10	Carbonate content	1.00
		Frost action	0.50			Content of large stones	0.20
						Droughty	0.18
Sogn----------------	15	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Shrink-swell	0.50	Slope	0.16	Droughty	0.35
		Frost action	0.50	Cutbanks cave	0.10	Slope	0.16
		Slope	0.16			Content of large stones	0.00

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    larger the value, the greater the potential limitation. See text for further explanation of
    ratings in this table.)

Map symbol and soil name	Pct of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
201LH:							
Lancaster-----------	50	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Depth to soft bedrock	0.54	Depth to bedrock	0.54
		Frost action	0.50	Cutbanks cave	0.10	Slope	0.04
		Slope	0.04	Slope	0.04		
Hedville------------	35	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.84
						Content of large stones	0.03
Be:							
Benfield------------	89	Very limited		Somewhat limited		Somewhat limited	
		Shrink-swell	1.00	Depth to soft bedrock	0.29	Depth to bedrock	0.29
		Low strength	1.00	Cutbanks cave	0.10	Content of large stones	0.03
		Frost action	0.50	Too clayey	0.04		
Cb:							
Calco---------------	90	Very limited		Very limited		Very limited	
		Frost action	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Flooding	1.00	Flooding	0.80	Depth to saturated zone	0.75
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
		Depth to saturated zone	0.75				
Cg:							
Cass---------------	89	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
		Frost action	0.50	Flooding	0.60		
Cr:							
Crete--------------	95	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Too clayey	0.12		
		Frost action	0.50	Cutbanks cave	0.10		
Cs:							
Crete--------------	90	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Too clayey	0.12		
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
CSS:							
Crete--------------	95	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Too clayey	0.12		
		Frost action	0.50	Cutbanks cave	0.10		
Ct:							
Crete--------------	83	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Too clayey	0.12		
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Cx:							
Crete--------------	83	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Too clayey	0.12		
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
Ed:							
Edalgo--------------	88	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Too clayey	0.50	Depth to bedrock	0.42
		Shrink-swell	1.00	Depth to soft bedrock	0.42		
		Frost action	0.50	Cutbanks cave	0.10		
Er:							
Eudora--------------	95	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
Eu:							
Eudora--------------	85	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10		
Gc:							
Geary--------------	83	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.96				

BUILDING SITE DEVELOPMENT--Continued
Clay County, Kansas

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    for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The
    larger the value, the greater the potential limitation. See text for further explanation of
    ratings in this table.)

Map symbol and soil name	Pct of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Gf:							
Geary---------------	85	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Slope	0.63	Slope	0.63
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.96				
		Slope	0.63				
Gh:							
Geary---------------	85	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.96				
Gm:							
Gibbon--------------	95	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Cutbanks cave	1.00	Flooding	0.60
		Flooding	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.03
		Depth to saturated zone	0.03	Flooding	0.60		
				Depth to dense layer	0.50		
He:							
Haynie--------------	65	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10		
Sarpy---------------	34	Very limited		Very limited		Somewhat limited	
		Flooding	1.00	Cutbanks cave	1.00	Flooding	0.60
				Flooding	0.60	Droughty	0.17
Hn:							
Hobbs---------------	93	Very limited		Somewhat limited		Very limited	
		Flooding	1.00	Flooding	0.80	Flooding	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
		Shrink-swell	0.00				
Ho:							
Hobbs---------------	89	Very limited		Somewhat limited		Somewhat limited	
		Flooding	1.00	Flooding	0.60	Flooding	0.60
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
		Shrink-swell	0.02				
Hr:							
Holder--------------	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.82				
		Frost action	0.50				
Ks:							
Kipson--------------	70	Somewhat limited		Very limited		Very limited	
		Depth to soft bedrock	1.00	Depth to soft bedrock	1.00	Depth to bedrock	1.00
		Slope	0.84	Slope	0.84	Carbonate content	1.00
		Shrink-swell	0.50	Cutbanks cave	0.10	Slope	0.84
		Frost action	0.50			Content of large stones	0.20
						Droughty	0.20
Sogn---------------	15	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	0.84	Slope	0.84	Droughty	0.92
		Shrink-swell	0.50	Cutbanks cave	0.10	Slope	0.84
		Frost action	0.50			Content of large stones	0.00
Lc:							
Lancaster-----------	90	Somewhat limited		Somewhat limited		Somewhat limited	
		Frost action	0.50	Cutbanks cave	0.10	Depth to bedrock	0.10
		Shrink-swell	0.06	Depth to soft bedrock	0.10		

BUILDING SITE DEVELOPMENT--Continued
Clay County, Kansas

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larger the value, the greater the potential limitation. See text for further explanation of
ratings in this table.)

Map symbol and soil name	Pct of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Lh:							
Lancaster-----------	55	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Cutbanks cave	0.10	Depth to bedrock	0.10
		Frost action	0.50	Depth to soft bedrock	0.10	Slope	0.04
		Shrink-swell	0.27	Slope	0.04		
		Slope	0.04				
Hedville-----------	30	Very limited		Very limited		Very limited	
		Depth to hard bedrock	1.00	Depth to hard bedrock	1.00	Depth to bedrock	1.00
		Slope	1.00	Slope	1.00	Slope	1.00
		Frost action	0.50	Cutbanks cave	0.10	Droughty	0.63
						Content of large stones	0.03
LN:							
Longford------------	85	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
M-W:							
Miscellaneous Water-	100	Not rated		Not rated		Not rated	
Mu:							
Muir----------------	89	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
		Flooding	0.40				
		Shrink-swell	0.00				
Sa:							
Sarpy---------------	90	Somewhat limited		Very limited		Somewhat limited	
		Flooding	0.40	Cutbanks cave	1.00	Droughty	0.48
Su:							
Sutphen-------------	88	Very limited		Very limited		Very limited	
		Shrink-swell	1.00	Ponding	1.00	Ponding	1.00
		Flooding	1.00	Flooding	0.60	Flooding	0.60
		Low strength	1.00	Too clayey	0.24		
		Ponding	1.00	Cutbanks cave	0.10		
Tu:							
Tully---------------	91	Very limited		Somewhat limited		Not limited	
		Shrink-swell	1.00	Too clayey	0.24		
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
W:							
Water---------------	100	Not rated		Not rated		Not rated	
We:							
Wells---------------	83	Somewhat limited		Somewhat limited		Not limited	
		Shrink-swell	0.73	Cutbanks cave	0.10		
		Frost action	0.50				